SATA RAID Function (Only For Chipset Sil 3112 /Sil 3512 Used)

USER'S MANUAL

12ME-SI3112-003

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<u>Notice</u>

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1. OVERVIEW

Product Overview

Silicon Image's SATARaid[™] provides Serial ATA Software RAID including Striping and Mirroring to enhance the industry's first proven PCI-to-SATA host controller product. Two major challenges facing the storage industry today are keeping pace with the increasing performance demands of computer systems by improving disk I/O throughput and providing data accessibility in the face of hard disk failures. With the Sil 3112 / Sil 3512 Serial ATA host controller and SATARaid, both of these problems are solved.

RAID Striping greatly improves hard disk I/O performance by concurrently Striping data across multiple drives. RAID Mirroring enables users to enjoy the confidence of data availability regardless of a single disk failure as data is simultaneously written to two drives.

Standard with SATARaid software is a Graphical User Interface (GUI) that provides easy-to-use configurations for the different RAID Sets supported.

SATARaid Features

- RAID 0 and 1
- Hot Spare and On-line Mirror Rebuilding
- System GUI Monitoring Utility:
 - Displays/Logs/Alerts Users to Vital RAID Set Information
 - Manages RAID Set Functions (configures, rebuilds, etc.)
- RAID Set Accommodates Multiple Size HDDs
- HDDs Function Normally When Not in RAID Sets
- Adjustable Stripe Size for RAID 0
- Automatically Selects Highest Available Transfer Speed for All ATA and ATAPI Devices
- Supports:
 - UDMA up to 150MB/Sec.
 - All UDMA and PIO Modes
 - Up to 2 SATA devices
 - ACPI and ATA/ATAPI6

RAID Explained

RAID - Redundant Array of Independent Disks

RAID technology manages multiple disk drives to enhance I/O performance and provide redundncy in order to withstand the failure of any individual member, without loss of data.

SATARaid provides two RAID Set types, Striped (RAID 0) and Mirrored (RAID 1).

Disk Striping (RAID 0)

Striping is a performance-oriented, non-redundant data mapping technique. While Striping is discussed as a RAID Set type, it is actually does not provide fault tolerance. With modern SATA and ATA bus mas-

tering technology, multiple I/O operations can be done in parallel, enhancing performance. Striping arrays use multiple disks to form a larger virtual disk.

This figure shows a stripe set using three disks with stripe one written to disk one, stripe two to disk two, and so forth.

Strip 0	Strip 1	Strip 2
Strip 3	Strip 4	Strip 5
Strip 6	Strip 7	Strip 8
Strip 9	Strip 10	Strip 11

Disk Mirroring (RAID 1)

Disk mirroring creates an identical twin for a selected disk by having the data simultaneously written to two disks. This redundancy provides instantaneous protection from a single disk failure. If a read failure occurs on one drive, the system reads the data from the other drive.

	Block 0
	Block 1
Block 0	Block 2
Block 1	Block 3
Block 2	
Block 3	J

2. INSTALLING DRIVERS AND SOFTWARE

Before you install the drivers, please prepare an empty floppy disk. Then copy the serial ATA controller drivers files from the driver CD-title into the floppy disk.

Please find the serial ATA controller drivers files under the driver CD-title : (we assume that your CD-ROM drive is D:) D:\Other\Sil\Si3112r\Si3112r → for RAID configuration or D:\Other\Sil\Si3112\Si3112 → for Base configuration

When install Windows 2000 or Windows XP from HDDs in serial ATA controller, press F6 as Win2000 or XP boots up, then supply serial ATA controller driver by this floppy disk.

Windows XP/2000 Operating System

Insert the floppy disk into the floppy disk drive and click **Browse**.

Most floppy disk drives are configured as **[A:]**. Choose the **[A:]** drive in your browser and the **Si3112r.inf** file for the Sil 3112. Select the file and click **Open**:

Verify that the directly listed in this window is A: and click **OK**.

Now, a window verifying that the new Driver for the board has been properly installed. Click Finish.

It is always good to Restart the computer after an installation. When asked to do so, Click Yes.

To install SATARaid, use Windows InstallShield by performing the following:

- 1. After computer restarts, insert cd in disk drive.
- 2. Double-click on Install SATARaid.exe.
- 3. Follow on-screen instructions to complete installation. **Note:** Do **NOT** install in the Start Up folder. Choose the Default folder (normally Accessories or Administrative Tools or something similar).

Windows NT Operating System

Insert the floppy in the floppy disk drive and click Have Disk.

The next window is asking for the location of the driver. Most floppy disk drives are configured as **[A:]**. To verify, click on **Browse**.

The next window verifies that the appropriate file is located on **[A:]**. Select the file **Oemsetup.inf** and click **Open**.

[A:] should appear in the window. Click OK

The next window allows you to select which driver to install. Only one driver should appear in this window. Select **Sil 3112 Raid Controller** and click on **OK**.

It is always good to Restart the computer after an installation. Click Yes.

To install the SATARaid GUI, use Windows InstallShield by performing the following:

- 1. After computer restarts, insert cd in disk drive.
- 2. Double-click on Install SATARaid.exe.
- 3. Follow on-screen instructions to complete installation. **Note:** Do **NOT** install in the Start Up folder. Choose the Default folder (normally Accessories or Administrative Tools or something similar).

Windows 98/Me Operating System

Follow the instructions in each window, using the driver installation files (sil3112r.sys) on the floppy disk as necessary.

To install the SATARaid GUI, use Windows InstallShield by performing the following:

- 1. After computer restarts, insert cd in disk drive.
- 2. Double-click on Install SATARaid.exe.
- 3. Follow on-screen instructions to complete installation. **Note:** Do **NOT** install in the Start Up folder.

Choose the Default folder (normally Accessories or Administrative Tools or something similar).

3. CREATING/DELETING RAID SETS

Creating and deleting RAID sets is a function found in the BIOS. During bootup, the following message will appear, pausing for a few moments to allow the user to choose what to do:

Press <CRTL-S> or F4 to enter RAID utility

An easy-to-use screen will appear with the following choices in the top left:

Create RAID Set Delete RAID Set Rebuild RAID Set Resolve Conflicts

Below this will be listed the drives currently installed on the system.

The top right half of the screen displays directions and comments for the user. The bottom right half lists the command keys:

Arrows up and down are Select Keys ESC takes the user to the previous menu Enter selects the user's choice Ctrl-E exits the utility

Creating RAID Sets

Becuase SATARaid supports two drives, creating RAID Sets is a simple procedure.

- 1. Select "Create RAID Set."
- 2. Choose either a "Striped" or "Mirrored" RAID Set.
- 3. Select if you want the utility to Auto Configure the RAID Set or if you want to manually configure the RAID Set. For Striped Sets, you can change the chunk size. For Mirrored Sets, you assign which is the Source and Target drives, as well as if you want Disk Copy.

What is Disk Copy? If the disk assigned as the source disk already has been partitioned and has data stored on it, and then a second disk is added for redundancy, the data on the source drive can be copied to the destination drive, so the disks are identical, and all subsequent data will be written to both drives as a Mirrored set. If, however, the source disk does not have data already stored on it, there is no need for Disk Copy.

4. The utility will ask "Are You Sure?" before completing the configuration.

Deleting RAID Sets

- 1. To remove one or more RAID sets, select "Delete RAID Set."
- 2. Select desired set and press Y when asked "Are You Sure?"

Resolving Conflict

When a RAID set is created, the metadata written to the disk includes drive connection information (Primary Chanel, Secondary Channel). If, after a disk failure, the replacement disk was previously part of a RAID set (or used in another system), it may have conflicting metadata, specifically in reference to the drive connection information. If so, this will prohibit the RAID set from being either created or rebuilt, In order for the RAID set to function properly, this old metadata must be first overwritten with the new metadata. To resolve this, select "Resolve Conflict" and the correct metadata, including the correct drive connection information, will be written to the replacement disk.

4. CREATING/NAMING PARTITIONS

The creating and naming of partitions is something done within the Windows operating system. And while Windows XP/2000 and Windows NT both use the Disk Management window, there are enough nuances that make it important to follow the procedure specifically for the appropriate operating system. The procedure for Windows 98/Me is significantly different than the others.

	/s XP/2000					- 🗆 ×								
Action View	← → 🗈 🗉													
Volume	Layout	Туре	File System	Status	Capacity	F								
SYSTEM DISK ((C:) Partition	Basic	FAT	Healthy (System)	3.73 GB	2								
•						Þ								
🗇 Disk 0														
19.08 GB	19.08 GB													
	Unallocated													
Disk 1 Basic														
19.07 GB Online	19.07 GB Unallocated											Wir	dows	NT
al Disk 2						🐴 Dis	sk Admi	inistrato					_ [۱×
Basic 19.08 GB	19.08 GB					Partitic	on <u>T</u> oo	ols <u>V</u> iew ₁	Options <u>I</u>	<u>l</u> elp				
Online	Unallocated					_ <u>=</u> 12	<u> </u>							
CBASIC	SYSTEM DISK (C)				_			— p			2			-
3.73 GB Online	3.73 GB FAT						Disk O							
(SCDD are 0	<u>]</u>					- 1		. /						
CDRom (D:)							10040 MI	•	1,2,340,140/		2			
Online							Disk 1				-			
Unallocated	Primary Partition					_			NTES					
						= 1	19540 MI	в	9540 MB					
								[///////	///////	///////////////////////////////////////	//////	///////	1
							Disk 2							
						4	13975 MI	B A	ree Space 13975 MB					
Window	/s 98/Me													4
🎇 fdisk						_ 🗆	× ₃	Ē	1:					1
Auto	• 🛄 🖻 🛍	🔁 🖻 🗄	Α											
		Micro: Fixed D	soft Windows S isk Setup Prog)8 Iram			ary	partition		2000 MD	NTEC		1	
	(C)Co	pyright Mi	crosoft Corp.	1983 - 1998			-			2000 MB	NIFS]U:		
		FD	ISK Options											
Current	t fixed disk dr	ive: 1												
Choose	one of the fol	lowing:												
1. Crea 2. Set	ate DOS partiti active partiti	on or Logi [,] on	cal DOS Drive											
3. Dele 4. Disp	ete partition o plav partition	r Logical informatio	DOS Drive N											
5. Chan	ige current fix	ed disk dr	ive											
Enter	hoice: [1]													
Press E	sc to exit FDI	SK												

Windows XP/2000 Operating System

Before creating any partitions, RAID sets must first be created/dissolved using the BIOS RAID Utility. Once completed, continue booting Windows.

Once Windows is running, open the Disk Management window located at:

Control Panel > Administrative Tools > Computer Management > Storage > Disk Management

Something similar to the following window should appear:

📙 Computer Ma	nagement					_ 🗆 X
Action View		12 🛛 😼				
Volume	Layout	Туре	File System	Status	Capacity	F
SYSTEM DISK (C:) Partition	Basic	FAT	Healthy (System)	3.73 GB	2
		SECT	ION 1			\nearrow
	I					
Disk 0						
SECTION 2	19.08 GB					
Unline	Unallocated					
CDisk 1						
19.07 GB	19.07 GB		SECTION 3			
Online	Unallocated					
주 ³ Disk 2						
Basic 19.08 GB	19.08 GB					
Online	Unallocated					
्य Disk 3						
Basic 3.73 GB	3.73 GB FAT					
Online	Healthy (System)					
lage de la seconda de la seco						
CDRom (D:)						
Online						
	Primary Partition					
	r nindiy raililion					

This window has three main sections:

SECTION 1: System listing of all formatted and available disks/RAID Sets. **SECTION 2:** Report of physical connection of disks/RAID Sets. **SECTION 3:** Report of partition status, disk letter, and volume name.

Initial Window

In SECTION 2, every disk should report as: Basic Disk Size (the actual available disk space will be reported here) Online

Instead of "Basic," a disk may also report as either "Unknown" or "Dynamic."

If the disk reports as "Unknown," right-click on the disk (SECTION 2) and click on Write Signature.

At this point, a window will appear with the disk in question (all "Unknown" disks may appear in this window). Make sure the box next to each disk is checked, then click OK.

The disk should now report as "Basic."

If a disk reports as "**Dynamic**," right-click on **SECTION 2** of that disk, and click on "**Return disk to Basic...**" Within seconds the disk should report as **Basic**.

Creating Partitions

In **SECTION 2**, the disk order corresponds directly to the order the Sets appear in the BIOS. Therefore, the first Unallocated Partition represents Set 1, and so on.

- 1. At this point, there should be three disks with Unallocated partitions. Right-click on the partition of the first disk and click on "Create Partition." The "Create Partition Wizard" should appear.
 - 1. The first window is an introductory window to the Wizard. Click **Next**.
 - 2. The second window designates the partition as a primary partition. Click **Next**.
 - 3. The third window designates the partition size. Since this is a Striped RAID set, utilizing 2 disk drives, the size of the partition should be approximately double the size of a single disk drive (assuming all disks are of identical size). Click **Next**.
 - 4. The fourth window designates the drive letter of the partition.

- 5. The fifth window allows the user to label the volume name, and choose the type of formatting to take place upon the creation of the partition. Choose which ever drive letter is desired (the lowest possible value is automatically entered), name the volume whatever is desired (suggestions being something generic such as STRIPED SET or something specific to use such as FINANCIAL, CRITICAL, MISCELLANEOUS, etc.) then check the box next to "quick format." Click **Next**.
- 6. The sixth window is a summary window listing all of the selections made. Click **Finish**.

Depending on the size of the disk drive(s) included in the partition, the partition should change from "Unallocated" to "Healthy" with its name and drive letter reported as well in a matter of minutes or less. Do not attempt to create a partition for the next disk until the disk currently being formatted is complete and reports **Healthy**.

Also note that once the disk reports Healthy, it appears in the listing in **SECTION 1** with all of its pertinent information as well.

- 2. Repeat this procedure for the partition of the second and third disk.
- 3. Close the Data Management window by clicking on the small boxed "X" in the top right corner of the window.
- 4. Click on the "My Computer" icon on the Desktop. The three new drives should now be visible and properly named. Data may now be stored to each of these disks if desired.

Windows NT Operating System

Before creating any partitions, RAID sets must first be created/dissolved using the BIOS RAID Utility. Once completed, continue booting Windows.

Once Windows is running, open the **Disk Administrator** window. The **Disk Administrator** window is located at:

Start > Programs > Disk Administrator (Common)

Something similar to the following window should appear:

🖀 Disk Administra	tor X
<u>Partition T</u> ools <u>V</u> ie	w <u>O</u> ptions <u>H</u> elp
🖃 Disk 0	
19540 MB	Free Space 19540 MB
🖃 Disk 1	F:
19540 MB	NTFS
🖃 Disk 2	
43975 MB	Free Space 43975 MB
🖃 Disk 3	× H: ▼
Primary partitio	n
Partition	2000 MB NTFS C:

However, this Write Signature window may appear first:



If so, answer **YES** for each disk reported with no signature found. Afterwards, something similar to the following should appear:

	🖀 Disk Administrator 📃	
	Partition <u>T</u> ools <u>V</u> iew <u>O</u> ptions <u>H</u> elp	
Button 1		_
	🖃 Disk 0	
Button 2	19540 MB 19540 MB	
	E Disk 1 F:	
	Section 1 19540 MB	
	Disk 2 Section 2	
	43975 MB 43925 MB	
	E Disk 3 H:	-
	Primary partition	
	Partition 2000 MB NTFS C:	

Button 1 opens the Disk Administrator Volumes window which lists the recognizable Volumes, their capacity, free space, type of format, etc.

Button 2 opens the Disk Configuration window (shown above), detailing all disks (or RAID Sets), partitions, and allows he suer to format and name each partition and volume.

Section 1 reports the size of each disk (or RAID Set).

Section 2 reports on each partition, and allows the user to format or delete partitions.

Creating Partitions

 If any disk (besides the SYSTEM DISK) appear to be formatted, right click on that partition (Section 2) and select **Delete**. <u>WARNING:</u> Be sure to identify the System Disk, that which has the Operating System installed on it. This disk should always report correctly. <u>NEVER</u>CHANGE OR DELETE THIS DISK OR PARTITION.

- 2. Once all disks are reporting as Free Space, right-click on each partition and select Create...
- 3. A Create Primary Partition window should now appear. Click OK.
- 4. Click **Confirm**.
- 5. Repeat this step for each disk.
- 6. Now, right-click on the first disk and select **Mark Active**.
- 7. A window will appear stating that this will take place on the next reboot. Click **OK**.
- 8. Repeat this step for each disk.
- 9. Close window. Confirm saving changes. Click Yes.
- 10. Disk Administrator will report that the disks were updated successfully. Click OK.
- 11. Re-open **Disk Administrator**.
- 12. Right-click on the first disk (this should now be the Striped Set).
- 13. Select Format...

Something similar to the following window should appear:

Format E:\	?×
Cagacity:	
Unknown capacity	•
<u>F</u> ile System	
NTFS	•
Allocation Unit Size	
Default allocation size	•
Volume <u>L</u> abel	
Format Options	
🔽 Quick Format	
Enable Compression	
Start Close	.
<u> </u>	

- 14. While Capacity can not be changed, make sure that File System has NTFS selected, don't change Default Allocation Size, and since it is the Striped Set that is being formatted, enter Striped Set for Volume Label. Make sure that Quick Format is selected as the Format Option.
- 15. Repeat this procedure for the other two disks, but name them something else.
- 16. Close **Disk Administrator** and open **My Computer** (icon should be on Desktop).
- 17. The new disks should now appear in **My Computer** window.
- 18. Close all windows and applications and **Restart** computer.

Windows 98/Me Operating System

Windows 9x does not have a Disk Administrator or Disk Management window. Instead, after creating RAID sets using the BIOS RAID utility and booting Windows, start fdisk by:

- 1. Click on the **START** button
- 2. Select Run...
- 3. Type fdisk
- 4. Click OK

The following window will probably appear:



Press Enter for yes.

The **FDISK Options** window will appear:

👺 fdisk	
Auto 💽 🛅 🔂 🚰 🖪	
Microsoft Windows 98 Fixed Disk Setup Program (C)Copyright Microsoft Corp. 1983 - 1998	
FDISK Options	
Current fixed disk drive: 1	
Choose one of the following:	
 Create DOS partition or Logical DOS Drive Set active partition Delete partition or Logical DOS Drive Display partition information Change current fixed disk drive 	
Enter choice: [<u>1</u>]	
Press Esc to exit FDISK	

The Current Fixed Drive will be the System Drive (normally C:\). In order to create partitions, the fixed drive needs to be changed. Select **5** and press **Enter**.

🎇 fdisk											<u> – – ×</u>
Auto	•		2	88	A						
			Chan	ge Curre	nt I	Fixed	d Dis	k Dri	ve		
Disk 1	Drv	Mbytes 814	Free	Usage 100%							
2 3	U:	814 29306 14653	29306 8	% 100%							
(1 Ent	MByte ∶ er Fixe	: 1048576 ed Disk D	bytes) rive Nu	mber (1-	3).					[<u>2</u>]	
Pre	ss Esc	to retur	n to FD	ISK Opti	ons						

Enter the disk number to partition and press Enter.

With the Current fixed drive set at the disk needing to be partitioned, Select 1 and press Enter.

🔀 fdisk 📃	
Auto 💽 []] 🖻 🛍 🚱 🕋 🗛	
FDISK Options	
Current fixed disk drive: 2	
Choose one of the following:	
1. Create DOS partition or Logical DOS Drive	
2. Set active partition 3. Delete partition or Logical DOS Drive	
4. Display partition information 5. Change current fixed disk drive	
Enter choice: [1]	
Proce Eco to puit ENTER	
Press Esc to exit FUISK	

The following window will appear:

Select 2 to create an extended partition and press Enter.

The following window will appear:



Once the percentage counter reaches 100%, the following window will appear:



This window explains how much space will be available in the partition. Press Enter.

This window shows that the partition has been created. Press **Esc**.



FDISK is now creating a logical drive.



Once the percentage counter reaches 100% the following window appears:

Once again, this window reports size.



Press **Enter** and the following window appears:



This window now shows the drive and its drive letter and size. Press Esc.

If another drive (RAID set) needs to be partitioned, repeat the process, starting by changing the fixed disk drive (Press **5**). If done, press **Esc**.

🔀 fdisk. 📃 🗌
Auto 💽 🛄 🖻 🛃 🕋 🗛
FUISK UPTIONS
Current fixed disk drive: 2
Choose one of the following:
1. Create DOS partition or Logical DOS Drive
 Set active partition Delete partition or Logical DOS Drive Discretification information
4. Display partition information 5. Change current fixed disk drive
Enter choice: [1]
Press Esc to exit FDISK

The following window will appear:



This window is a reminder to **RESTART** the computer.

After restarting the computer, and booting Windows 9x, double-click on the **My Computer** icon.

Right-click on each new drive and select **Format**.

Only a **FULL** format will be accepted at this point. Select Full Format, enter the Label Name for the drive or RAID set (if desired) and click **OK**.

Once the drive has been formatted, repeat for each new drive. The new drives should now be ready to be used.

5. USING SILICON IMAGE SATARaid GUI

Overview

The SATARaid GUI offers the user the ability to easily monitor your RAID Set.

To launch the GUI, simply double-click on the icon located in the bottom right hand corner of the Desktop. If the icon does not appear in the bottom right hand corner of the desktop, find where the application was saved and launch from there.

Upon launching the GUI, the the first window which identifies the computer running SATARaid should appear similar to the following:



Selecting each different component in the configuration tree provides specific information for that component, such as the chip.



Selecting a specific channel, either Primary or Secondary, the following information is reported:

SAE-LELT5Y14VRE	Channel	
PCI-3112U-0 * Primary Master		Addresses IDE Base: 7800 Alt Base: 7C02
► ⊡ 🐨 Secondary		DMA DMA Base: 8800
⊟~on ga Seto Gi Seto		Cable 80-pin Cable: Yes
		Hot Swap Device After a device is added or removed click the refresh button to update the tree view. Refresh

* For PCI-3112 or 3512

Selecting a specific drive reports all pertinent information to that drive, including Configuration and Disk Identification information.



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* For PCI-3112 or 3512

Selecting Sets lists the Sets in the configuration tree and provides information on RIO Version:



By selecting a specific RAID set, such as Set 0, the type of RAID set, the number of members and capacity is reported.





The Members tab of this window reports the device identification (corresponding with the information in the BIOS) and the State of each device.

Besides reporting information, the Members tab of a Mirrored set allows the user to remove a specific drive from that set, as well as add a designated Spare drive to a Mirrored set that has experienced a disk failure. A drive can NOT be removed from a Striped set as this would destroy all data. Note that when a Mirrored Set is first created, the State of the "destination" drive may report as Rebuild for as much as 30-90 minutes depending on the size of the disk.

^{*} For PCI-3112 or 3512

SMART and Configuration information, as well as Data Identification is again provided for each Set.



FAE-LELT5Y14VRE	Set	Member	s SMA	ART/Co	nfigurat	ion Id	entify D	ata
☐ ■ PCI-3112U-0 *	D	+0	+1	+2	+3	+4	+5	+6 🔨
Mastar	0000	0040	3fff	c837	0010	0000	0000	00(
Widster	0008	0000	0000	0000	0000	0000	0000	00(
🖃 😇 Secondary	0016	0000	0000	0000	0000	0003	1000	00(
🛛 🎯 Master	0024	3030	2020	2020	6953	2049	4152	44
E 🚱 Sets	0032	5320	7465	2020	2020	2020	2020	202
de caro	0040	2020	2020	2020	2020	2020	2020	202
Co Seru	0048	0000	2f00	4000	0200	0000	0007	3fff
	0056	003f	fc10	00fb	0110	6c00	1315	00(
	0064	0003	0078	0078	0078	0078	0000	00(
	0072	0000	0000	0000	0000	0000	0000	00(
	0080	007e	0018	7c69	4f09	4003	7c69	Oc(
	0088	407f	0000	0000	0000	0000	603b	c0(
	0096	0000	0000	0000	0000	6c00	1315	00(🤜
	0104	0000	0000	0000	0000	0000	0000	001

* For PCI-3112 or 3512

SATARaid Configuration Menu

By clicking on the toolbox icon in the top left of the SATARaid GUI window, or right-clicking on the conductor icon in the bottom right of the computer screen (with other start-up icons), the user may configure SATARaid including customizing the settings for SMTP, E-mail, Notification, Event Level, Log File, Audio, and Popup.

SMTP

The SMTP server is the server that is used to send e-mails. Normally, the network administrator knows what this name is. Both the name and domain must be entered.

Configura	ation Menu		
Log Fil	e	Audio	Popup
SMTP	E-mail	Notification	Event Level
SMTP Info A SMTP s Contact yo this server SMTP Co SMTP Se	ormation erver is the se our network ac r. Be sure to In Example: s nfiguration rver: SMTP.c	rver that is use to Iministrator to find clude the name a erver.company.co ompany.domain	send e-mails. out the name of nd domain. om
		OK	Cancel

E-Mail

The current SATARaid configuration may be sent via e-mail. Using the e-mail tab in the SATARaid Configuration Menu, the user may set the default e-mail address and subject line to where the configuration would be sent. This, however, can be overridden at the time of sending the email.

.onfigurat	ion Menu		
Log File		Audio	Popup
SMTP	E-mail	Notification	Event Leve
E-mail Inforr The e-mail a Medley con the point wh	nation address and figuration by nen the confi guration	subject are use wh e-mail. Both can b iguration is sent.	en sending the e overriden at
E-mail Addr	ess:		
E-mail Subj	ect: SilCfg	g - Configuration inf	ormation from s
		OK	Cancel

Notification

When different types of events occur, SATARa may be configured to send notices to assigne individual e-mail addresses. Using th Notification tab, all e-mail addresses desired to receive the notices may be entered.

Configuration Men	u	
Log File	Audio	Popup Event Level
E-mail Notification Info E-mail notification is us in the list for each ever event subject will be th Subject: • Event from system S	mation e to send an e-mail to nt received from the o ne subject of each e-r	e each address driver. The mail sent.
Address List:		Add <u>R</u> emove
	ОК	Cancel

Event Level

There are different types of e-mail notification that may be sent which are set with the Even Level tab. The different levels are:

Disabled - No event logs will be sent.

- Informational The following events will be ser
 - Informational
 - Warnings
 - Errors
- Warning The following events will be sent:
 - Warnings
 - Errors
- Errors The following events will be sent: - Errors

Configur	ation Menu		
Log Fil SMTP	e E-mail	Audio Notification	Popup Event Level
Event Lev The even by e-mail.	vel Information t level sets whi vel Configuratio Move the slide	ich level of event	logs are sent
	Disabled - No	event logs will be	sent.

Log File

The log file is used to store event information received from all the Silicon Image RAID drivers. The log file is a text file and can be viewed with Notepad or SATARaid. Use the Log File tab to set where the log file should be stored and the name of the file as well.

Configuration Me	nu	
SMTP E-mail Log File	Notification Audio	Event Level Popup
Log File Information The log file is used t IDE drivers. The log event property page O Disable Log File O Enable Log File	o store event received file can be viewed with of the GUI.	from all the SII Notepad or the
Name: errigr.txt Location: c:\		Browse Purge
	OK	Cancel

Audio

The user may set different audio alerts for the different levels of events.

Configura	tion Men	u				
SMTP	E-mail	Notificatio	n	Event Level		
Log File		Audio		Popup		
Audio Notif Audio notifi user that a	Audio Notification Information Audio notification is use to alert the system administrator or user that an event occurred.					
Audio Notil	ication Conf	iguration				
Select the	sound to pla	ay by clicking th	e browse	button or		
click the disable button for no sound notification.						
Disable			Browse	Disable		
Warning E	vent:					
Disable	d	(Browse	Disable		
Error Even	t:					
Disable	d	(Browse	Disable		
			K	Cancel		

Popup

The popup window is a visual notification that an event occurred. The popup window can be disabled or set to popup for only certain event levels. The different levels are:

Disabled - No popup will occur.

- Informational The popup window will be displayed for the following events:
 - Informational
 - Warnings
 - Errors
- Warning The popup window will be displayed for the following events:
 - Warnings
 - Errors
- Errors The popup window will be displayed for the following events:
 - Errors

